**SUMMARY**



**Customer**
RedBite Solutions

**Industry**
Healthcare / technology

**Challenge**
Automate RFID tag scanning to track and trace the location of dialysis machines without human intervention

**Solution**
itemit asset tracking and location solution
Zebra FX7500 Fixed RFID Readers
Zebra Data Services™
Zebra Savanna™

**Results**
- Two weeks of clinician time saved each year
- Enhanced efficiencies – machines are always easily located and available for use
- Solution was up and running in weeks
- Cost-effective out-of-the-box solution with limited need for customisation

# Saving Clinicians Two Weeks a Year at a Leading Irish Hospital

Leading RFID Expert Reduces the Cost and Complexity of RFID Deployments with Zebra Technologies

RedBite Solutions has a strong heritage in RFID. Formed in 2006 as a spin-out from the University of Cambridge, RedBite's founders were part of the Cambridge University Auto-ID Centre and helped establish GS1 EPC standards for RFID.

The company has built the world's biggest deployment of RFID across 60 countries and has customised solutions for Rolls-Royce, Boeing and Sony among others.

## The Need to Streamline RFID Asset Tracking

As RFID technology has matured, more functions have been added. This has increased the complexity of deployments that were already challenging for many organisations, especially small and medium enterprises.

For example, companies needed to build customised applications to deploy and monitor their RFID readers and transmit the asset data they collected. Furthermore, servers and middleware were needed locally to collect data from readers and share this across the corporate network. Consequently, every RFID solution needed to be custom-designed. It was not unusual for projects to take several years, and they often involved software specialists, systems integrators and hardware vendors. For these reasons, the technology became the preserve of large enterprises.

"Managing many different partners in an RFID deployment can be onerous," says Dr Alex C. Y. Wong, CEO and a founder of RedBite. "But we felt we could change the dynamics of RFID to make it more affordable and easier to deploy and manage. We had the opportunity to test our hypothesis with a well-known hospital in Ireland."

## Creating a Streamlined Tracking Solution in a Clinical Environment

Prior to its discussions with the hospital, RedBite had identified that most enterprises want to do common things with RFID, such as understanding what assets they have and where, who has them, what condition they are in and what's available to use. With this in mind, it built a cloud-based application, 'itemit', with simplified RFID features, removing some of the complex functionality that is not needed by most customers.

Ready out of the box, itemit was a cost-effective solution for the hospital, as it primarily wanted to track the location of its dialysis machines. It had already installed RFID tags, as these could be read over long distances using handheld readers, without having to disturb patients.

However, capturing data from all the tags took 50 minutes. And, to ensure the data was timely, it needed to be collected several times a day. What's more, during evenings and weekends when there may not have been enough staff free

to run the checks, this could lead to machines being misplaced.

To overcome these inefficiencies, the hospital opted to install Zebra FX7500 Fixed RFID Readers. With the help of RedBite, the readers were connected to itemit using Zebra Data Services™.

Zebra Data Services removes the need to write bespoke applications for RFID readers or install servers and middleware to connect them to the host management platform. It offers a range of REST Application Programming Interfaces (APIs) that connect to Zebra Savanna™ – an intelligent data platform that collects and aggregates data from Zebra's devices. Using the APIs, Zebra Savanna integrates with itemit across the internet. In addition, the RFID readers can be managed and controlled using a REST API interface via the cloud.

Charlotte Ellarby, Associate Director of RedBite and Co-Founder of itemit, says: "With Zebra Data Services, installing fixed RFID readers and controlling these from itemit is similar to, if not easier than, creating a Wi-Fi network. Essentially the solution turns readers into Internet of Things (IoT) devices. With zero coding needed to connect the readers, we finished the installation in a couple of weeks, with asset data connected into itemit. Previously this would have taken months."

## Enhancing Efficiencies for Clinicians

Through RedBite Solution's itemit asset tracking software system, IT teams can easily install and configure their Zebra fixed radio frequency identification (RFID) readers and assign them to a location. The RFID tag data from the hospital's 70 dialysis machines is read continuously, with no human intervention, and is sent via Zebra Savanna™ directly to itemit. itemit offers a comprehensive range of other capabilities too – from managing asset maintenance, to booking equipment in and out, and many more. Also, IT teams can monitor and manage their RFID readers remotely from within the itemit application, with a rich range of configurable asset reports available.

Results are impressive: staff are saving around two weeks a year in time. And, with plans to expand the rollout to cover 3,000 assets across the hospital, further time savings are expected to be exponential.

Mark Jolley, RFID Sales Director at Zebra, says: "We see this low, or no code, deployment scenario using Zebra Data Services as a game-changer. It hugely reduces the cost and complexity of RFID projects. Whatever business you're in, from tracking and tracing farm animals, to monitoring equipment on construction sites, or keeping an eye on medical or lab equipment, to knowing where your laptops are, it's now easier to use RFID to protect your people and assets, reduce your costs and work more effectively."

"As we have shown with the deployment of an asset tracking solution in a hospital in Ireland that's saving clinicians a huge amount of time, we can now build no code, or low code, plug and play RFID solutions. This makes the technology affordable and attractive to all organisations that want to track, trace and protect their assets."

**Dr Alex C. Y. Wong,**
CEO

To learn more visit: **zebra.com**